

**Remarks**

**A. Status of the Claims**

Claims 1-29 are pending in the application. Claims 1-29 stand rejected by the Examiner. By this amendment claim 14 is amended. No new matter is added.

**B. Claim Rejections**

**1. 102 Rejections**

Claims 1 and 3-12 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,521,087 to Hansen, *et al.* ("Hansen"). The Applicants respectfully traverse this rejection and request reconsideration and allowance of the pending claims in view of the following remarks.

The Office Action alleges that Hansen teaches an absorbent core having the same materials as the Applicants' claimed invention (namely, wood pulp fibers and SAP), and therefore, "the absorbent core of Hansen is fully capable of exhibiting an absorptive capacity of 32 grams to 60 grams." Office Action, page 3. A claim is anticipated by a reference only if "each and every element as set forth in the claim is found, either express or inherently described" in the reference. *Verdegaal Bros v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The Examiner's rejection appears to be based on alleged inherency, since Hansen does not expressly disclose the physical properties claimed in the present invention. The Applicants respectfully submit that Hansen does not expressly or inherently disclose an absorbent core having a front pad total absorbent capacity greater than 32 grams.

In *E.I. duPont & Co. v. Phillips Petroleum Co.*, the CAFC held that "[o]n occasion, particularly with polymers, structure alone may be inadequate to define the invention, making it appropriate to define the invention in part by property limitations." 849 F.2d 1430, 1435, 7 USPQ2d 1129 (Fed. Cir. 1988). In the *E.I. duPont* case, the claims in

question recited a polymer having specific structure and specific properties. The court held that the structure alone was *inadequate* to determine anticipation of a claimed polymer: "the issue is not... whether one can get a patent on discovering a new property of an old composition of matter. The issue is whether the claimed copolymer as defined in part by various property parameters, is new." *Id.* at 1436. This logic is equally applicable to the present application, in which an absorbent core produced generally from wood pulp and SAP is disclosed in Hansen, but an absorbent core defined in part by the front pad total absorptive capacity is new over what is disclosed in Hansen. First, Hansen completely fails to disclose front pad total absorptive capacity, or *any* absorbent capacity as a characteristic of performance for an absorbent pad or core. Second, while Hansen simply discloses an absorbent pad comprised of wood pulp and SAP, the absorbent properties that result from the various possible combinations of these raw materials are infinitely variable. Given the rudimentary teachings of Hansen with regard to the selection of those material, one could experiment indefinitely without ever obtaining the present invention.

In contrast, the Applicants have unexpectedly found that front pad total absorbent capacity of an absorbent article drives the overall product performance. Traditionally, it has been thought that the total absorbent capacity of an absorbent core (*i.e.*, absorbent capacity measured over the *entire* absorbent core) is correlated to overall urine leakage of a product during normal use. However, Applicants have unexpectedly found that products having a *front pad* total absorbent capacity of at least 32 grams have low urine leakage results, regardless of the absorbent capacity of other regions of the absorbent article, and regardless of the total absorbent capacity of the absorbent article.

Protection against leakage is optimized if the front pad 40 has an average absorptive capacity of at least 32 grams as provided. Notably, the absorptive capacity of the other portions of the absorbent core 6 do not

significantly affect the urine leakage results if the front pad 40 total absorptive capacity is at least about 32 grams.

Specification, page 23, lines 16-20. *See also*, Example 2 on page 32, lines 5-14 (in-vivo urine leakage test method); and Figure 6 (in-vivo urine leakage test results). This discovery has led to the ability to design more efficient absorbent cores. *See*, for example, page 24, lines 1-7. Hansen says nothing about the effect of the front pad total absorbent capacity on overall product performance.

In following with this discovery, the Applicants have further discovered that only a particular subset of material combinations produces an absorbent core having the claimed front pad total absorbent capacity of at least 32 grams:

A number of techniques may be used to provide an optimized front pad 40 to improve leakage protection. For example, high AUL SAP may be disposed in the front pad 40 of the absorbent core 6 to provide the desired front pad total absorptive capacity of at least about 32 grams. Alternatively, high concentrations of lower AUL SAP may be disposed in the front pad 40 of absorbent core 6 to provide the desired front pad total absorptive capacity of at least about 32 grams. In one embodiment, the front pad 40 has a higher amount by weight of core composite material than in other areas of the absorbent core 6 to provide the desired total absorptive capacity of at least about 32 grams.

Specification, page 23, lines 21-29. Absorbent cores having a front pad total absorbent capacity greater than 32 are not taught by Hansen, nor are they inherently disclosed by the material combinations taught by Hansen. As shown in Example 1 of the present application, Applicants tested the front pad total absorptive capacity for several commercially-available and experimental products. While each of the tested products has an absorbent core comprising a mixture of fluff pulp and SAP, as taught by Hansen, only 2 products — the Applicants' own experimental products G and M — exhibit a front pad total absorptive capacity of at least 32 grams. Therefore, not all absorbent cores comprising fluff pulp and SAP are necessarily capable of exhibiting a front pad

total absorptive capacity of at least about 32 grams, as alleged by the Examiner. Indeed, this data clearly shows that the Examiner's assumption in this regard is incorrect.

In summary, Hansen does not disclose an absorbent core having a front pad absorbent capacity greater than 32 grams, nor is this feature inherent in the disclosure of Hansen. In contrast, claim 1 recites an absorbent core having a front pad that has an absorptive capacity of at least about 32 grams. Claims 3-12 depend from claim 1, and include by reference all of the features of claim 1. Therefore, the Applicants respectfully request that the Examiner reconsider and withdraw these rejections and allow claims 1 and 3-12.

Claims 15, 17-22, 24, 26 and 28-29 stand rejected under 35 U.S.C. § 102(e) as anticipated by Hansen. Claim 15 is an independent claim that recites an absorbent article having an absorbent core with a front pad absorbent capacity of at least 32 grams. Claims 17-21 depend from claim 15, and therefore include by reference all of the features of claim 15. Therefore, the Applicants respectfully submit that for at least the same reasons given above, claims 15 and 17-21 are also not anticipated by Hansen.

Claims 22 and 24 are independent claims reciting a method for producing an absorbent article comprising an absorbent core having a front pad absorbent capacity of at least 32 grams. Claim 26 is an independent claim reciting a method for providing leakage protection in an absorbent article, whereby the method includes providing an absorbent core having a front pad absorptive capacity of at least 32 grams. Claims 28 and 29 are independent claims reciting a method for designing an absorbent core that includes varying the weight and/or composition of the composite in a front pad of the absorbent core until the absorptive core of the front pad on average is at least about 32 grams. Each of these claims recites an absorbent core having a front pad absorptive capacity of at least 32 grams. Therefore, the Applicants respectfully submit that for at

least the same reasons given above, claims 22, 24, 26, and 28-29 are also not anticipated by Hansen.

2. 103 Rejections

In the alternative, the Office Action rejects claims 15, 17-22, 24, 26 and 28-29 under 35 U.S.C. § 103(a) as obvious over Hansen. Three criteria must be met to establish a *prima facie* case of obviousness: (1) there must be some suggestion or motivation to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art references must teach or suggest all the claim limitations. See MPEP § 2142 *et seq.* For the same reasons set forth above with respect to claim 1, Applicants respectfully submit that the prior art of record fails to teach or suggest all of the features of the pending claims — specifically, an absorbent core having a front pad absorptive capacity of at least about 32 grams — and therefore there is no *prima facie* case of obviousness. Accordingly, the Applicants respectfully request that the Examiner reconsider and withdraw these rejections and allow claims 15, 17-22, 24, 26 and 28-29.

Claims 2, 14, 16, 23, 25 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hansen. Claims 2, 14, 16, 23, 25 and 27 depend from one of the independent claims addressed above, and as such include by reference all of the features of the claim they depend from. For the same reasons set forth above with respect to claim 1, Applicants respectfully submit that the prior art of record fails to teach or suggest all of the features of the pending claims — namely, an absorbent core having a front pad absorptive capacity of at least about 32 grams — and therefore there is no *prima facie* case of obviousness. Accordingly, the Applicants respectfully request that the Examiner reconsider and withdraw these rejections and allow claims 2, 14, 16, 23, 25 and 27.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hansen in view of U.S. Patent No. 5,843,059 to Niemeyer, *et al.* ("Niemeyer"). Claim 13 depends from independent claim 1. As explained above, Hansen fails to teach or suggest an absorbent core having a front pad absorptive capacity of at least about 32 grams, as recited in claim 1. Niemeyer is insufficient to remedy this critical deficiency of Hansen. As such, there is no *prima facie* case of obviousness because the combined references fail to teach or suggest all of the features of the pending claims. Accordingly, the Applicants respectfully request that the Examiner reconsider and withdraw this rejection and allow claim 13.

#### **Conclusion**

The Applicants respectfully submit that the application is in condition for allowance. Should any outstanding issues remain, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,  
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